

Release notes for ENDF/B Development n-070_Yb_170
evaluation

ENDF
B-VII.**dev**

April 26, 2017

- psyche Warnings:

1. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04 / STRENGTH FUNCTION 1.80019E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
FILE 2
SECTION 151
ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04
STRENGTH FUNCTION 1.80019E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
... [4 more lines]
```

2. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04 / STRENGTH FUNCTION 1.80020E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
FILE 2
SECTION 151
ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04
STRENGTH FUNCTION 1.80020E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
... [6 more lines]
```

3. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04 / STRENGTH FUNCTION 1.80024E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
FILE 2
SECTION 151
ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04
STRENGTH FUNCTION 1.80024E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
... [10 more lines]
```

4. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04 / STRENGTH FUNCTION 1.80017E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
FILE 2
SECTION 151
ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04
STRENGTH FUNCTION 1.80017E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
... [1 more lines]
```

5. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04 / STRENGTH FUNCTION 1.80021E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

FILE 2
SECTION 151
ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04
STRENGTH FUNCTION 1.80021E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
... [2 more lines]

6. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04 / STRENGTH FUNCTION 1.80018E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

FILE 2
SECTION 151
ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04
STRENGTH FUNCTION 1.80018E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
... [7 more lines]

7. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04 / STRENGTH FUNCTION 1.80022E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

FILE 2
SECTION 151
ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04
STRENGTH FUNCTION 1.80022E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
... [5 more lines]

8. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04 / STRENGTH FUNCTION 1.80025E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

FILE 2
SECTION 151
ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04
STRENGTH FUNCTION 1.80025E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04

9. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04 / STRENGTH FUNCTION 1.80023E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

FILE 2
SECTION 151
ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04
STRENGTH FUNCTION 1.80023E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04

10. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04 / STRENGTH FUNCTION 1.80026E-04 / LIES OUTSIDE LIMITS

1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
FILE 2
SECTION 151
ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04
STRENGTH FUNCTION 1.80026E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
... [2 more lines]
```

11. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04 / STRENGTH FUNCTION 1.80028E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
FILE 2
SECTION 151
ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04
STRENGTH FUNCTION 1.80028E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
```

12. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04 / STRENGTH FUNCTION 1.80013E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
FILE 2
SECTION 151
ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04
STRENGTH FUNCTION 1.80013E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
```

13. Strength function in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04 / STRENGTH FUNCTION 1.80031E-04 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04 (0): URR str. ftn.

```
FILE 2
SECTION 151
ENERGY = 1.40000E+03. STRENGTH FUNCTION IS 1.80019E-04
STRENGTH FUNCTION 1.80031E-04
LIES OUTSIDE LIMITS 1.00000E-05 TO 1.50000E-04
```

- **groupie Errors:**

1. Very small elastic cross section found
0: Small elastic

Multi-Group and Multi-Band Parameters from ENDF/B Data (GROUPIE 2015-2)

```
-----
ENDF/B Input and Output Data Filenames
ENDFB.IN
ENDFB.OUT
... [97 more lines]
```

- **fudge-4.0 Warnings:**

1. Missing a channel with a particular angular momenta combination
resonances / resolved / MultiLevelBreitWigner (Error # 0): missingResonanceChannel

WARNING: Missing a channel with angular momenta combination L = 0, J = 1.5 and S = 1.5 for "capture"

2. Potential scattering hasn't converted, you need more L's!
resonances / resolved (Error # 1): potentialScatteringNotConverged

WARNING: Potential scattering hasn't converged by L=0 at E=1400.0 eV, xs[0]/xs[0]=100.0% > 0.1%

3. Cross section does not match sum of linked reaction cross sections
crossSectionSum label 0: total (Error # 0): CS Sum.

WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.19%

4. Cross section does not match sum of linked reaction cross sections
crossSectionSum label 1: nonelastic (Error # 0): CS Sum.

WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.81%

- fudge-4.0 Errors:

1. Calculated and tabulated Q values disagree.
reaction label 12: n[multiplicity:'2'] + Yb169 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -8508178.072753906 eV vs -8469964. eV!

2. Calculated and tabulated Q values disagree.
reaction label 13: n[multiplicity:'3'] + Yb168 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -15375160.32843018 eV vs -15336950. eV!

3. Calculated and tabulated Q values disagree.
reaction label 14: n + H1 + Tm169 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -6816179.059417725 eV vs -6777965. eV!

4. Calculated and tabulated Q values disagree.
reaction label 15: n + H2 + Tm168 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -12625229.09790039 eV vs -12587010. eV!

5. Calculated and tabulated Q values disagree.
reaction label 16: Yb171 + gamma (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 6576282.343261719 eV vs 6614496. eV!

6. Calculated and tabulated Q values disagree.
reaction label 17: n + He4 + Er166 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 1699508.704315186 eV vs 1737722. eV!

7. Calculated and tabulated Q values disagree.
reaction label 18: H1 + Tm170_s (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -224211.1062316895 eV vs -185997.3 eV!

8. Calculated and tabulated Q values disagree.
reaction label 19: H2 + Tm169_s (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -4591612.958496094 eV vs -4553399. eV!

9. Calculated and tabulated Q values disagree.
reaction label 20: H3 + Tm168_s (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -6367996.157287598 eV vs -6329782. eV!

10. Calculated and tabulated Q values disagree.
reaction label 21: He3 + Er168_s (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -4670338.448028564 eV vs -4632124. eV!

11. Calculated and tabulated Q values disagree.
reaction label 22: He4 + Er167_s (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 8135962.794891357 eV vs 8174176. eV!

- njoy2012 Warnings:

1. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (0): HEATR/hinit (4)

---message from hinit---mf6, mt 16 does not give recoil za= 70169
one-particle recoil approx. used.

2. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (1): HEATR/hinit (4)

---message from hinit---mf6, mt 17 does not give recoil za= 70168
one-particle recoil approx. used.

3. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (2): HEATR/hinit (4)

---message from hinit---mf6, mt 22 does not give recoil za= 70170
one-particle recoil approx. used.

4. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (3): HEATR/hinit (4)

---message from hinit---mf6, mt 28 does not give recoil za= 70170
one-particle recoil approx. used.

5. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (4): HEATR/hinit (4)

---message from hinit---mf6, mt 32 does not give recoil za= 70170
one-particle recoil approx. used.

6. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (5): HEATR/hinit (4)

- message from hinit---mf6, mt 51 does not give recoil za= 70170
one-particle recoil approx. used.
7. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (6): HEATR/hinit (4)
- message from hinit---mf6, mt 52 does not give recoil za= 70170
one-particle recoil approx. used.
8. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (7): HEATR/hinit (4)
- message from hinit---mf6, mt 53 does not give recoil za= 70170
one-particle recoil approx. used.
9. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (8): HEATR/hinit (4)
- message from hinit---mf6, mt 54 does not give recoil za= 70170
one-particle recoil approx. used.
10. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (9): HEATR/hinit (4)
- message from hinit---mf6, mt 55 does not give recoil za= 70170
one-particle recoil approx. used.
11. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (10): HEATR/hinit (4)
- message from hinit---mf6, mt 56 does not give recoil za= 70170
one-particle recoil approx. used.
12. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (11): HEATR/hinit (4)
- message from hinit---mf6, mt 57 does not give recoil za= 70170
one-particle recoil approx. used.
13. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (12): HEATR/hinit (4)
- message from hinit---mf6, mt 58 does not give recoil za= 70170
one-particle recoil approx. used.
14. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (13): HEATR/hinit (4)
- message from hinit---mf6, mt 59 does not give recoil za= 70170
one-particle recoil approx. used.
15. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (14): HEATR/hinit (4)
- message from hinit---mf6, mt 60 does not give recoil za= 70170
one-particle recoil approx. used.

16. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (15): HEATR/hinit (4)

```
---message from hinit---mf6, mt 91 does not give recoil za= 70170
one-particle recoil approx. used.
```

17. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (16): HEATR/hinit (4)

```
---message from hinit---mf6, mt203 does not give recoil za= 69170
one-particle recoil approx. used.
```

18. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (17): HEATR/hinit (4)

```
---message from hinit---mf6, mt204 does not give recoil za= 69169
one-particle recoil approx. used.
```

19. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (18): HEATR/hinit (4)

```
---message from hinit---mf6, mt205 does not give recoil za= 69168
one-particle recoil approx. used.
```

20. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (19): HEATR/hinit (4)

```
---message from hinit---mf6, mt206 does not give recoil za= 68168
one-particle recoil approx. used.
```

21. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (20): HEATR/hinit (4)

```
---message from hinit---mf6, mt207 does not give recoil za= 68167
one-particle recoil approx. used.
```

• njoy2012 Errors:

1. An unidentified mismatch in a photon production sum
check...ace consistency check (0): Gamma sum

```
check photon production sum
consis: mismatch at 1.216713E-04 gpd= 2.825496E-01 sum= 2.825160E-01
```

2. An unidentified mismatch in a photon production sum
check...ace consistency check (1): Gamma sum

```
check photon production sum
consis: mismatch at 3.106381E-04 gpd= 2.440815E-01 sum= 2.440495E-01
```

3. An unidentified mismatch in a photon production sum
check...ace consistency check (2): Gamma sum

```
check photon production sum
consis: mismatch at 4.693767E-04 gpd= 2.591405E-01 sum= 2.591135E-01
```

4. An unidentified mismatch in a photon production sum
check...ace consistency check (3): Gamma sum


```

check photon production sum
consis: mismatch at 4.702698E-04 gpd= 2.391967E-01 sum= 2.391670E-01

```
5. An unidentified mismatch in a photon production sum
check...ace consistency check (4): Gamma sum


```

check photon production sum
consis: mismatch at 4.711629E-04 gpd= 2.216527E-01 sum= 2.216156E-01

```
6. An unidentified mismatch in a photon production sum
check...ace consistency check (5): Gamma sum


```

check photon production sum
consis: mismatch at 4.742887E-04 gpd= 1.744414E-01 sum= 1.744224E-01

```
7. An unidentified mismatch in a photon production sum
check...ace consistency check (6): Gamma sum


```

check photon production sum
consis: mismatch at 4.751817E-04 gpd= 1.639730E-01 sum= 1.639925E-01

```
8. An unidentified mismatch in a photon production sum
check...ace consistency check (7): Gamma sum


```

check photon production sum
consis: mismatch at 4.762158E-04 gpd= 1.531735E-01 sum= 1.531905E-01

```
9. An unidentified mismatch in a photon production sum
check...ace consistency check (8): Gamma sum


```

check photon production sum
consis: mismatch at 4.782840E-04 gpd= 1.349263E-01 sum= 1.349493E-01

```
10. An unidentified mismatch in a photon production sum
check...ace consistency check (9): Gamma sum


```

check photon production sum
consis: mismatch at 4.793181E-04 gpd= 1.271888E-01 sum= 1.272065E-01

```
11. An unidentified mismatch in a photon production sum
check...ace consistency check (10): Gamma sum


```

check photon production sum
consis: mismatch at 4.803522E-04 gpd= 1.202374E-01 sum= 1.202209E-01

```
12. An unidentified mismatch in a photon production sum
check...ace consistency check (11): Gamma sum


```

check photon production sum
consis: mismatch at 4.834545E-04 gpd= 1.029004E-01 sum= 1.029178E-01

```
13. An unidentified mismatch in a photon production sum
check...ace consistency check (12): Gamma sum

- check photon production sum
consis: mismatch at 6.286916E-04 gpd= 2.382565E-01 sum= 2.382281E-01
14. An unidentified mismatch in a photon production sum
check...ace consistency check (13): Gamma sum
- check photon production sum
consis: mismatch at 6.299684E-04 gpd= 2.072233E-01 sum= 2.071881E-01
15. An unidentified mismatch in a photon production sum
check...ace consistency check (14): Gamma sum
- check photon production sum
consis: mismatch at 6.307710E-04 gpd= 1.908378E-01 sum= 1.908662E-01
16. An unidentified mismatch in a photon production sum
check...ace consistency check (15): Gamma sum
- check photon production sum
consis: mismatch at 6.934763E-04 gpd= 3.167111E-02 sum= 3.167504E-02
17. An unidentified mismatch in a photon production sum
check...ace consistency check (16): Gamma sum
- check photon production sum
consis: mismatch at 8.229699E-04 gpd= 2.548479E-01 sum= 2.548807E-01
18. An unidentified mismatch in a photon production sum
check...ace consistency check (17): Gamma sum
- check photon production sum
consis: mismatch at 1.004765E-03 gpd= 2.119014E-01 sum= 2.118740E-01
19. An unidentified mismatch in a photon production sum
check...ace consistency check (18): Gamma sum
- check photon production sum
consis: mismatch at 1.007941E-03 gpd= 1.859938E-01 sum= 1.859675E-01
20. An unidentified mismatch in a photon production sum
check...ace consistency check (19): Gamma sum
- check photon production sum
consis: mismatch at 1.050131E-03 gpd= 2.537566E-01 sum= 2.537848E-01
21. An unidentified mismatch in a photon production sum
check...ace consistency check (20): Gamma sum
- check photon production sum
consis: mismatch at 1.056827E-03 gpd= 1.217263E-01 sum= 1.217532E-01
22. An unidentified mismatch in a photon production sum
check...ace consistency check (21): Gamma sum
- check photon production sum
consis: mismatch at 1.057522E-03 gpd= 1.148143E-01 sum= 1.147975E-01

23. An unidentified mismatch in a photon production sum
check...ace consistency check (22): Gamma sum
- ```

check photon production sum
consis: mismatch at 1.058217E-03 gpd= 1.084818E-01 sum= 1.084959E-01

```
24. An unidentified mismatch in a photon production sum  
*check...ace consistency check (23): Gamma sum*
- ```

check photon production sum
consis: mismatch at 1.059607E-03 gpd= 9.755516E-02 sum= 9.754166E-02

```
25. An unidentified mismatch in a photon production sum
check...ace consistency check (24): Gamma sum
- ```

check photon production sum
consis: mismatch at 1.060996E-03 gpd= 8.840821E-02 sum= 8.838635E-02

```
26. An unidentified mismatch in a photon production sum  
*check...ace consistency check (25): Gamma sum*
- ```

check photon production sum
consis: mismatch at 1.062323E-03 gpd= 8.095820E-02 sum= 8.097955E-02

```
27. An unidentified mismatch in a photon production sum
check...ace consistency check (26): Gamma sum
- ```

check photon production sum
consis: mismatch at 1.064976E-03 gpd= 6.903818E-02 sum= 6.902146E-02

```
28. An unidentified mismatch in a photon production sum  
*check...ace consistency check (27): Gamma sum*
- ```

check photon production sum
consis: mismatch at 1.066302E-03 gpd= 6.419567E-02 sum= 6.416512E-02

```
29. An unidentified mismatch in a photon production sum
check...ace consistency check (28): Gamma sum
- ```

check photon production sum
consis: mismatch at 1.067629E-03 gpd= 5.984982E-02 sum= 5.988753E-02

```
30. An unidentified mismatch in a photon production sum  
*check...ace consistency check (29): Gamma sum*
- ```

check photon production sum
consis: mismatch at 1.068955E-03 gpd= 5.608342E-02 sum= 5.610230E-02

```
31. An unidentified mismatch in a photon production sum
check...ace consistency check (30): Gamma sum
- ```

check photon production sum
consis: mismatch at 1.089296E-03 gpd= 2.769881E-02 sum= 2.769596E-02

```
32. An unidentified mismatch in a photon production sum  
*check...ace consistency check (31): Gamma sum*

- check photon production sum  
consis: mismatch at 1.105972E-03 gpd= 1.950791E-02 sum= 1.951095E-02
33. An unidentified mismatch in a photon production sum  
*check...ace consistency check (32): Gamma sum*
- check photon production sum  
consis: mismatch at 1.110015E-03 gpd= 1.825383E-02 sum= 1.825099E-02
34. An unidentified mismatch in a photon production sum  
*check...ace consistency check (33): Gamma sum*
- check photon production sum  
consis: mismatch at 1.130230E-03 gpd= 1.411910E-02 sum= 1.412131E-02
35. An unidentified mismatch in a photon production sum  
*check...ace consistency check (34): Gamma sum*
- check photon production sum  
consis: mismatch at 1.146401E-03 gpd= 1.240980E-02 sum= 1.241367E-02
36. An unidentified mismatch in a photon production sum  
*check...ace consistency check (35): Gamma sum*
- check photon production sum  
consis: mismatch at 1.154487E-03 gpd= 1.190491E-02 sum= 1.190672E-02
37. An unidentified mismatch in a photon production sum  
*check...ace consistency check (36): Gamma sum*
- check photon production sum  
consis: mismatch at 1.162573E-03 gpd= 1.159042E-02 sum= 1.159220E-02
38. An unidentified mismatch in a photon production sum  
*check...ace consistency check (37): Gamma sum*
- check photon production sum  
consis: mismatch at 1.186578E-03 gpd= 1.174390E-02 sum= 1.174230E-02
39. An unidentified mismatch in a photon production sum  
*check...ace consistency check (38): Gamma sum*
- check photon production sum  
consis: mismatch at 1.191884E-03 gpd= 1.201718E-02 sum= 1.201992E-02
40. An unidentified mismatch in a photon production sum  
*check...ace consistency check (39): Gamma sum*
- check photon production sum  
consis: mismatch at 1.202497E-03 gpd= 1.291148E-02 sum= 1.291016E-02
41. An unidentified mismatch in a photon production sum  
*check...ace consistency check (40): Gamma sum*
- check photon production sum  
consis: mismatch at 1.207803E-03 gpd= 1.356976E-02 sum= 1.356823E-02

42. An unidentified mismatch in a photon production sum  
*check...ace consistency check (41): Gamma sum*
- ```

check photon production sum
consis: mismatch at 1.235344E-03 gpd= 2.116253E-02 sum= 2.115939E-02

```
43. An unidentified mismatch in a photon production sum
check...ace consistency check (42): Gamma sum
- ```

check photon production sum
consis: mismatch at 1.341043E-03 gpd= 1.798119E-01 sum= 1.798315E-01

```
44. An unidentified mismatch in a photon production sum  
*check...ace consistency check (43): Gamma sum*
- ```

check photon production sum
consis: mismatch at 1.341675E-03 gpd= 1.652383E-01 sum= 1.652213E-01

```
45. An unidentified mismatch in a photon production sum
check...ace consistency check (44): Gamma sum
- ```

check photon production sum
consis: mismatch at 1.344202E-03 gpd= 1.224696E-01 sum= 1.225014E-01

```
46. An unidentified mismatch in a photon production sum  
*check...ace consistency check (45): Gamma sum*
- ```

check photon production sum
consis: mismatch at 1.344833E-03 gpd= 1.146031E-01 sum= 1.146146E-01

```
47. An unidentified mismatch in a photon production sum
check...ace consistency check (46): Gamma sum
- ```

check photon production sum
consis: mismatch at 1.346869E-03 gpd= 9.415034E-02 sum= 9.413767E-02

```
48. An unidentified mismatch in a photon production sum  
*check...ace consistency check (47): Gamma sum*
- ```

check photon production sum
consis: mismatch at 1.347641E-03 gpd= 8.789857E-02 sum= 8.791364E-02

```
49. An unidentified mismatch in a photon production sum
check...ace consistency check (48): Gamma sum
- ```

check photon production sum
consis: mismatch at 1.350729E-03 gpd= 6.877062E-02 sum= 6.873654E-02

```
50. An unidentified mismatch in a photon production sum  
*check...ace consistency check (49): Gamma sum*
- ```

check photon production sum
consis: mismatch at 1.352273E-03 gpd= 6.160798E-02 sum= 6.162123E-02

```
51. An unidentified mismatch in a photon production sum
check...ace consistency check (50): Gamma sum

- check photon production sum
 consis: mismatch at 1.390174E-03 gpd= 1.394934E-02 sum= 1.395122E-02
52. An unidentified mismatch in a photon production sum
check...ace consistency check (51): Gamma sum
- check photon production sum
 consis: mismatch at 1.395508E-03 gpd= 1.232220E-02 sum= 1.231847E-02
53. An unidentified mismatch in a photon production sum
check...ace consistency check (52): Gamma sum
- check photon production sum
 consis: mismatch at 1.397193E-03 gpd= 1.201582E-02 sum= 1.201304E-02
54. An unidentified mismatch in a photon production sum
check...ace consistency check (53): Gamma sum
- check photon production sum
 consis: mismatch at 1.397334E-03 gpd= 1.221043E-02 sum= 1.220825E-02
55. An unidentified mismatch in a photon production sum
check...ace consistency check (54): Gamma sum
- check photon production sum
 consis: mismatch at 1.397474E-03 gpd= 1.272800E-02 sum= 1.273133E-02
56. An unidentified mismatch in a photon production sum
check...ace consistency check (55): Gamma sum
- check photon production sum
 consis: mismatch at 1.397614E-03 gpd= 1.399086E-02 sum= 1.398892E-02
57. An unidentified mismatch in a photon production sum
check...ace consistency check (56): Gamma sum
- check photon production sum
 consis: mismatch at 1.397684E-03 gpd= 1.512537E-02 sum= 1.512722E-02
58. An unidentified mismatch in a photon production sum
check...ace consistency check (57): Gamma sum
- check photon production sum
 consis: mismatch at 1.397825E-03 gpd= 1.930731E-02 sum= 1.930455E-02